

COST 718 Meeting, Sept 2004
Ljubljana, Slovenia



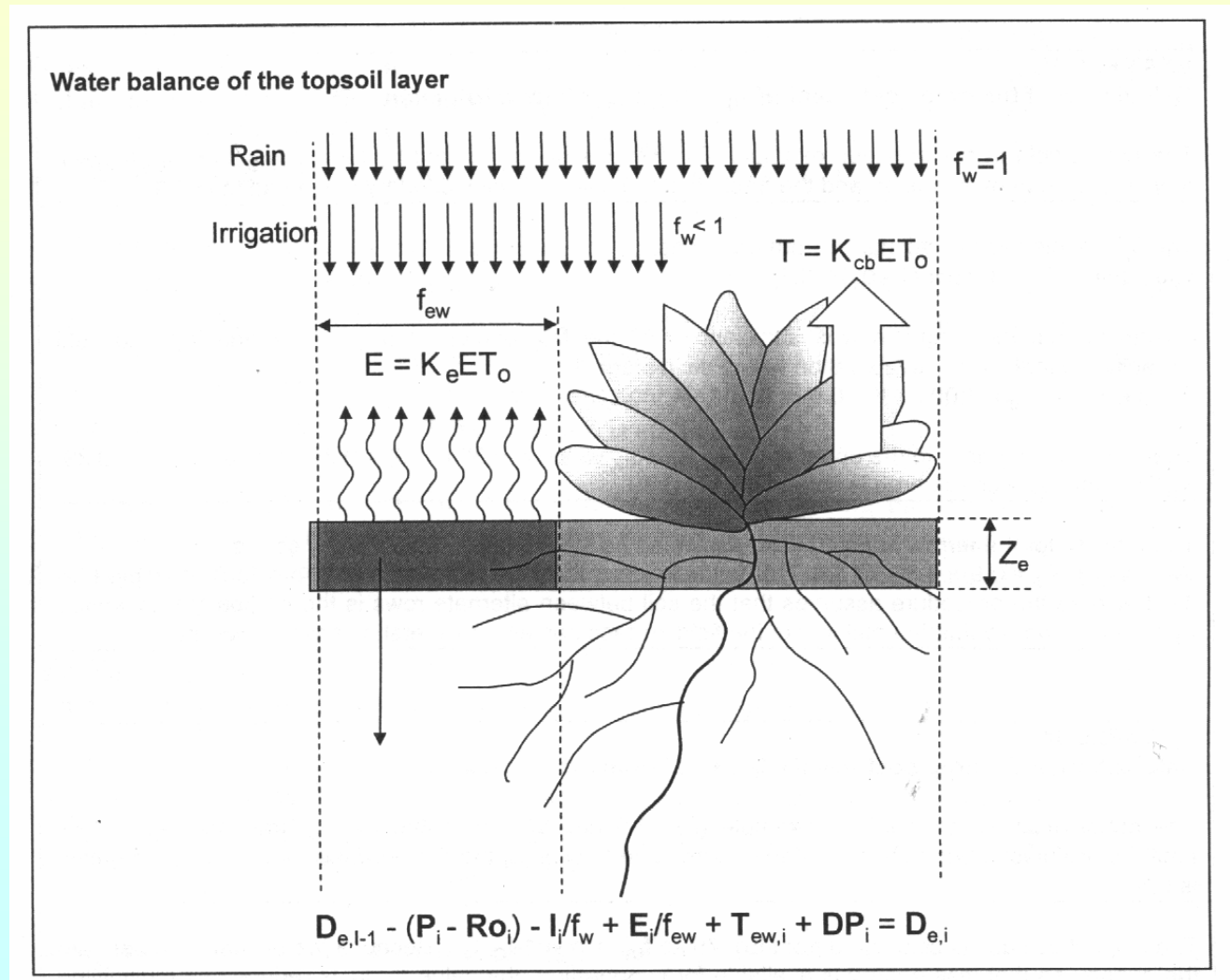
National status report - Austria

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**Adapting the FAO model
for grassland in Austria
(Allen et al., 1998)**

Simplified water balance model (Cropwat approach)



Parametrization for :

Soil layers :

0-10 cm, only evaporation

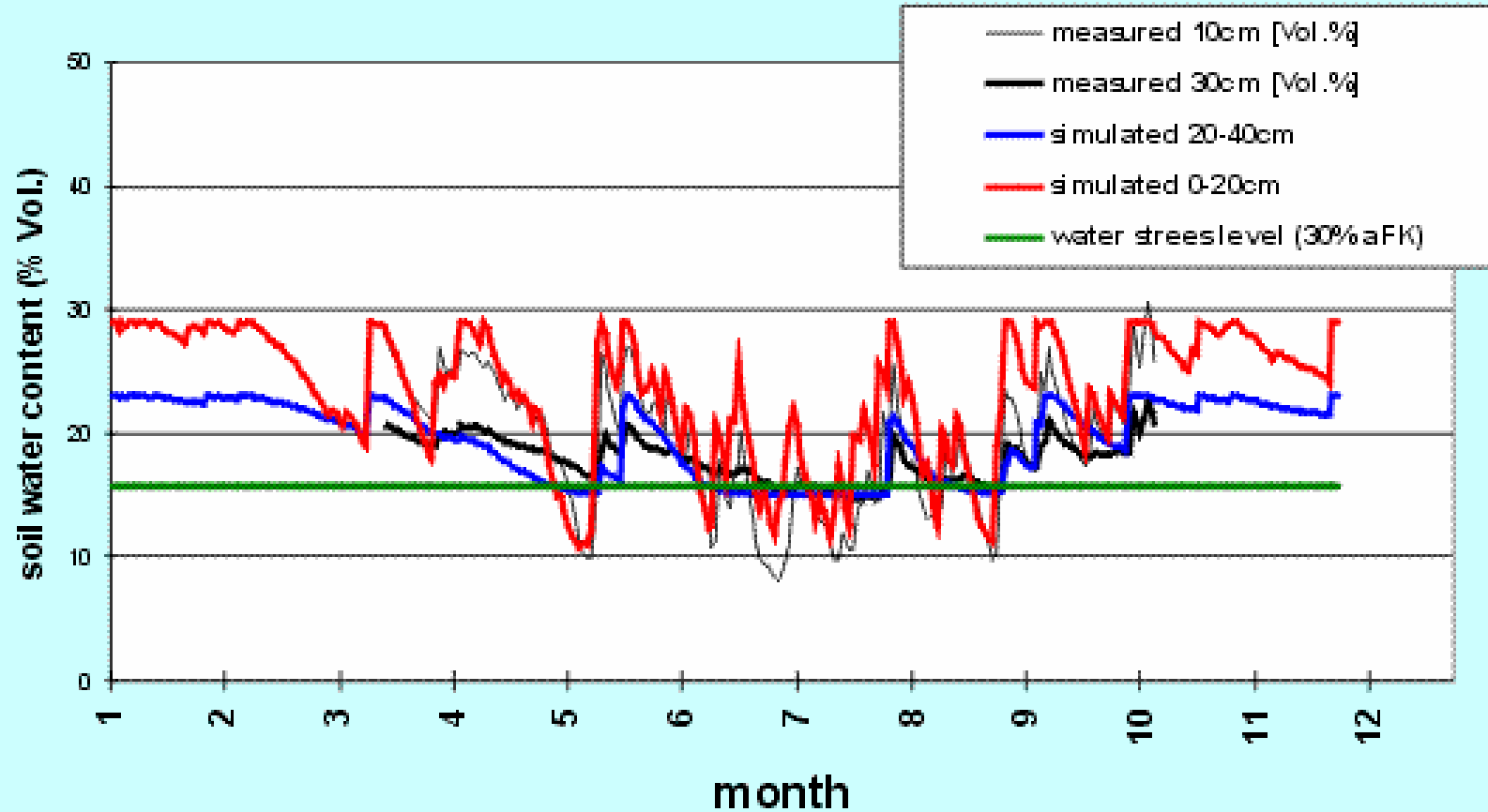
10-20 cm, evapotranspiration, Penman-Monteith

20-40 cm, evapotranspiration, Penman- Monteith

4 grassland experimental sites in Austria for model testing.

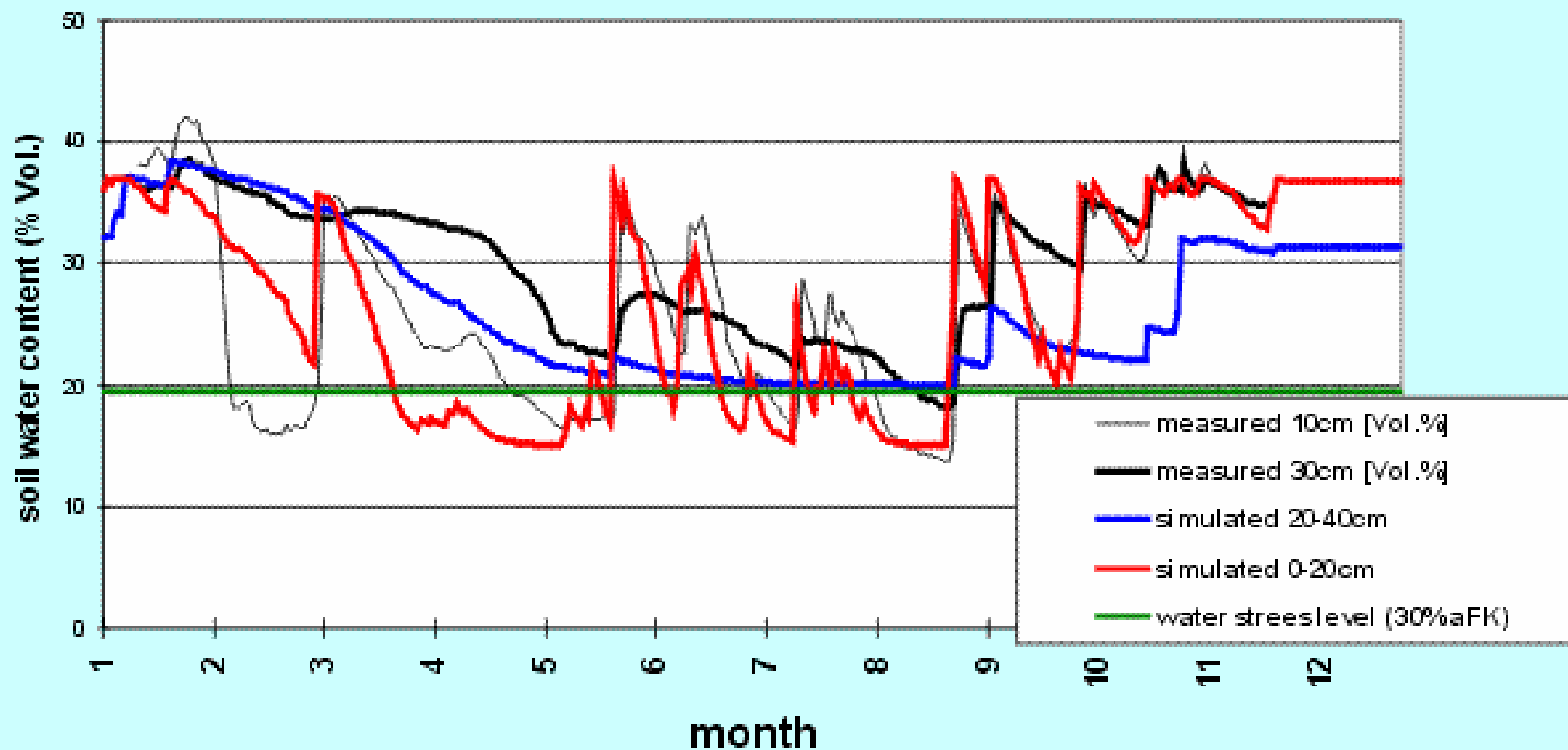
Year 2003 (drought)

Measured and simulated soil water content
FAO model, Site G1, 2003

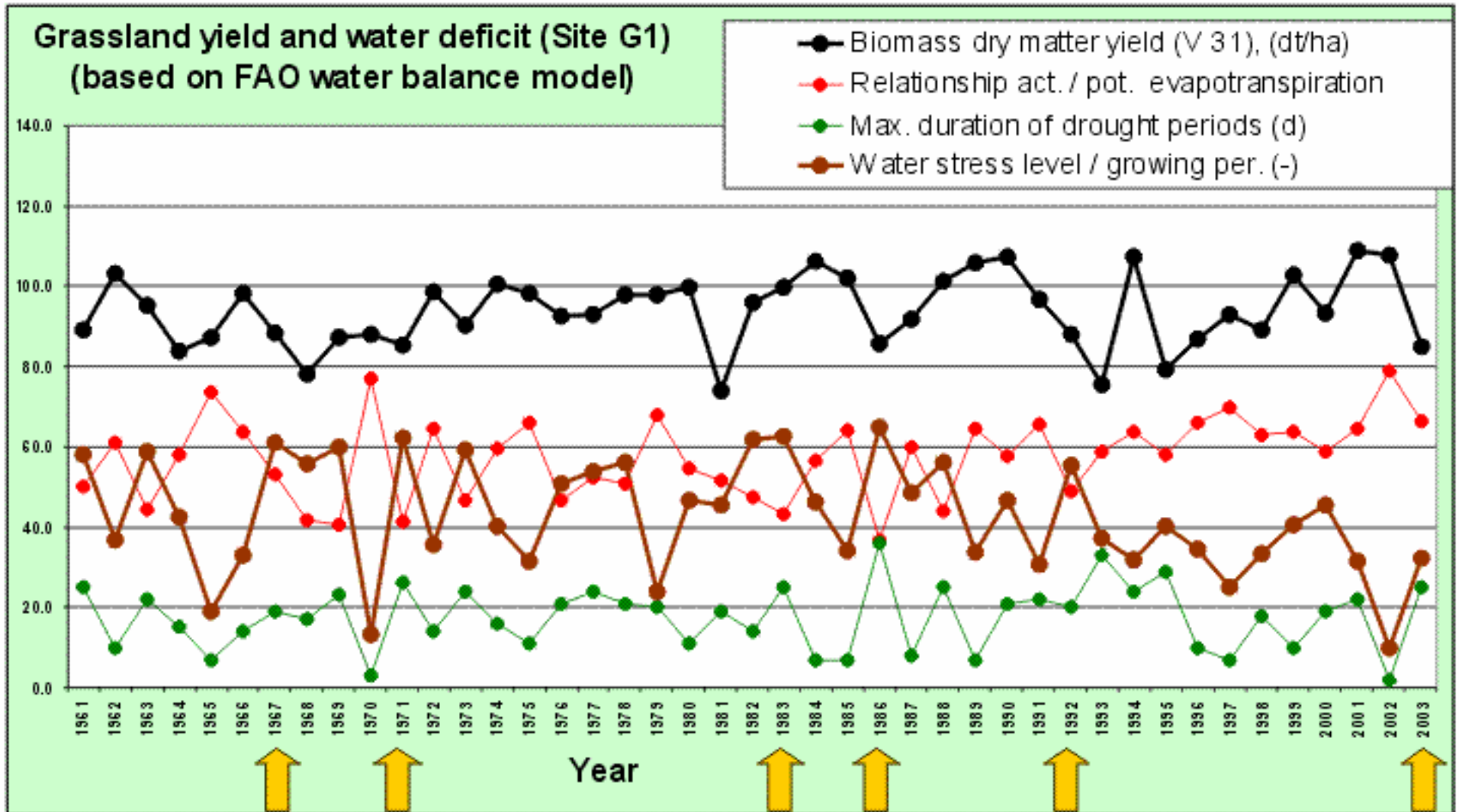


Site G1 - sandy soil

Measured and simulated soil water content FAO model, Site G3, 2003

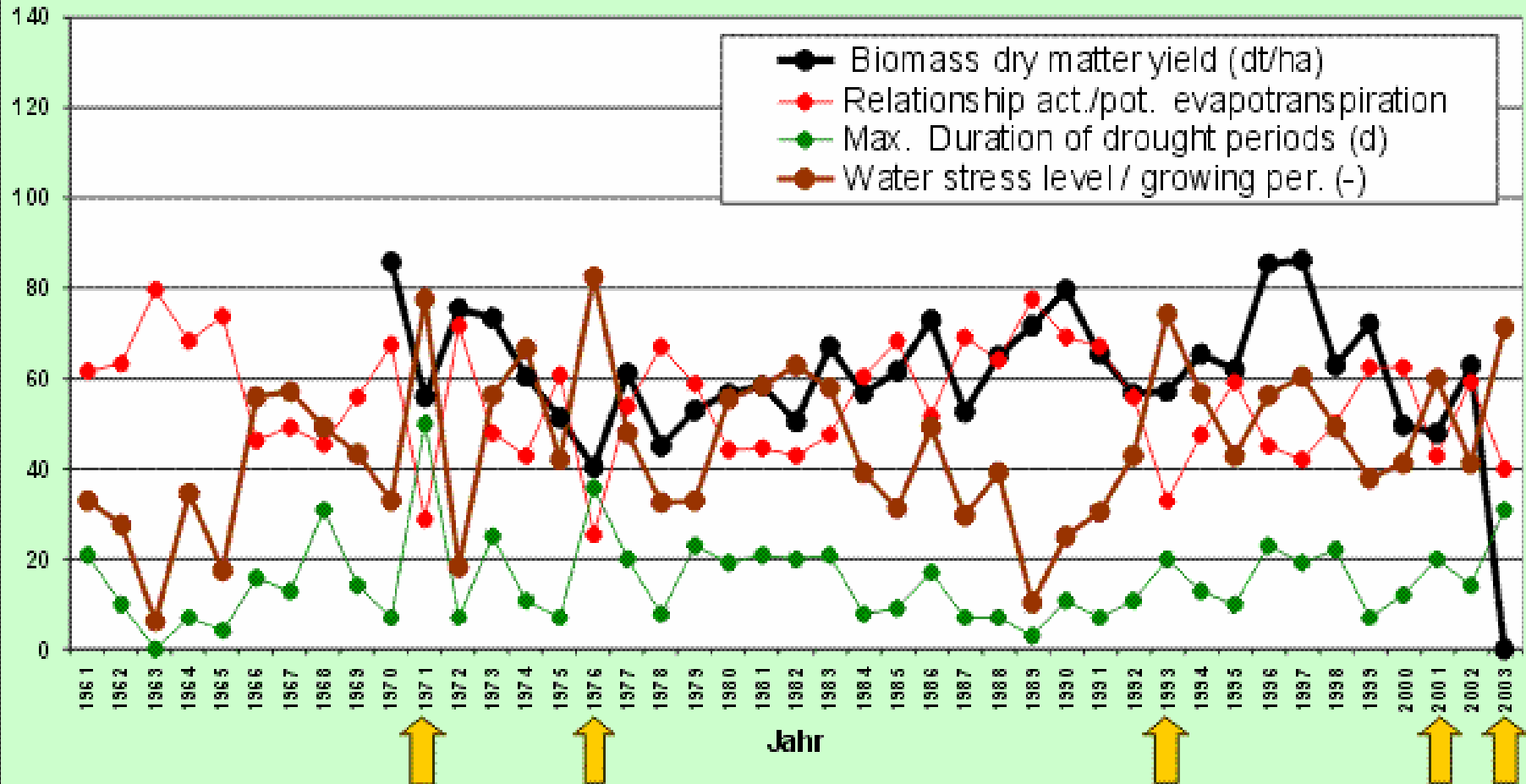


Site G3 - loamy soil



Water balance parameters and grass yield (humid site)

Grassland yield and water deficit (Site G2) (based on FAO water balance model)



Water balance parameters and grass yield (semi-arid site)

Conclusion

The adapted FAO model for Austrian grassland shows :

- good results for soil water content 0-20 cm (main rooting zone)
 - more deviations for the 20-40 cm layer (heavy soils)
 - not useable for biomass yield detection in grassland
- useable for detection of yield depressions by extreme drought events (crop insurance)

Project AGRIDEMA

AGRIDEMA - a SSA funded by EC

INTRODUCING TOOLS FOR AGRICULTURAL DECISION-MAKING UNDER CLIMATE CHANGE CONDITIONS BY CONNECTING USERS AND TOOL-PROVIDERS

Specific Support Action

SUB-PRIORITY CLIMATE CHANGE AND ECOSYSTEMS (1.1.6.3.)

Call identifier FP6-2003-Global-2

Managed by :

- Agrarian Technological Institute of Castilla and Leon (ITA), Spain (Coordinator).
- University of Natural Resources and Applied Life Sciences, (BOKU), Austria.
- National Institute of Meteorology and Hydrology (NIMH-BAS), Bulgaria.

Start : October 2004

Duration : 30 month

Activities : Courses, pilot projects

Budget : 250 000 Euros

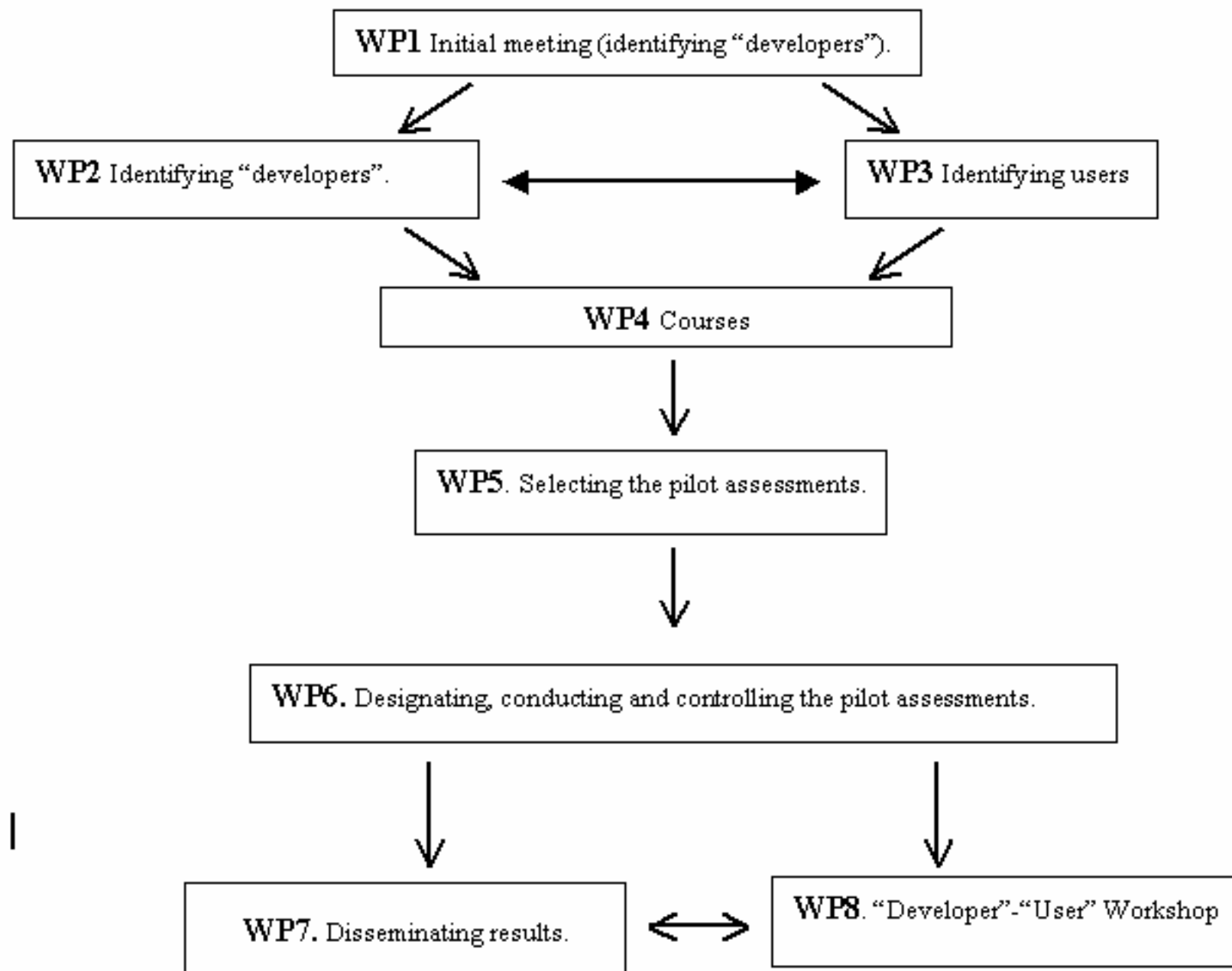
Looking for :

Model "developers"

and

model "users" in Central - eastern - south Europe

Models to be useable in "practice" for decision making



Which "models" will be included ?

1. Global Circulation Models and Seasonal Forecasts

2. Regional climate models, weather generators
and downscaling methods

3. Agricultural-Impact models

- complex crop models

- more simple approaches

(such as irrigation scheduling models or drought risk assessment algorithms)

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